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Proposed Maximum Residue Limit

PMRL2014-48

Sethoxydim

(publié aussi en français)

31 July 2014

This document is published by the Health Canada Pest Management Regulatory Agency. For further information, please contact:

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ISSN: 1925-0835 (print)
1925-0843 (online)

Catalogue number: H113-24/2014-48E (print version)
H113-24/2014-48E-PDF (PDF version)

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Under the authority of the *Pest Control Products Act*, Health Canada's Pest Management Regulatory Agency (PMRA) has concluded that the addition of the new use on grapes to the product label of Poast Ultra Liquid Emulsifiable Herbicide, containing technical grade sethoxydim, is acceptable. The specific use approved in Canada is detailed on the label of Poast Ultra Liquid Emulsifiable Herbicide, *Pest Control Products Act* Registration Number 24835.

The evaluation of this sethoxydim application indicated that the end-use product has merit and value and the human health and environmental risks associated with the new use is acceptable.

Before registering a pesticide for food use in Canada, the PMRA must determine the quantity of residues that are likely to remain in or on the food when the pesticide is used according to label directions and that such residues will not be a concern to human health. This quantity is then legally established as a maximum residue limit (MRL). An MRL applies to the identified raw agricultural food commodity as well as to any processed food product that contains it, except where separate MRLs are specified for the raw agricultural commodity and a processed product made from it.

Consultation on the proposed MRLs for sethoxydim is being conducted via this document (see Next Steps, the last section of this document). A summary of the field trial data used to support the proposed MRLs can be found in Appendix I.

To comply with Canada's international trade obligations, consultation on the proposed MRLs is also being conducted internationally by notifying the World Trade Organization, as coordinated by the Standards Council of Canada.

The proposed MRLs, to be added to the MRLs already established for sethoxydim, are as follows.

Table 1 Proposed Maximum Residue Limits for Sethoxydim

Common Name	Residue Definition	MRL (ppm) ¹	Food Commodity
Sethoxydim	(±)-2-[1-(ethoxyimino)butyl]-5-[2-(ethylthio)propyl]-3-hydroxy-2-cyclohexen-1-one, including metabolites containing the cyclohexen-2-one moiety, expressed as sethoxydim	0.20	Small fruit vine climbing subgroup, except fuzzy kiwifruit (Crop Subgroup 13-07F)
		0.60	Raisins

¹ ppm = parts per million

MRLs are proposed for each commodity included in the listed crop groupings in accordance with the Residue Chemistry Crop Groups webpage in the Pesticides and Pest Management section of Health Canada's website.

MRLs established in Canada may be found using the Maximum Residue Limit Database on the Maximum Residue Limits for Pesticides webpage. The database allows users to search for established MRLs, regulated under the *Pest Control Products Act* (PCPA), both for pesticides or for food commodities.

International Situation and Trade Implications

MRLs may vary from one country to another for a number of reasons, including differences in pesticide use patterns and the locations of the field crop trials used to generate residue chemistry data.

Table 2 compares the MRLs proposed for sethoxydim in Canada with corresponding American tolerances as listed in the Electronic Code of Federal Regulations, 40 CFR Part 180, by pesticide. Currently, there are no Codex MRLs¹ listed for sethoxydim in or on any commodity on the Codex Alimentarius Pesticide Residues in Food webpage.

Table 2 Comparison of Canadian MRLs, American Tolerances and Codex MRLs

Food Commodity	Canadian MRL (ppm)	American Tolerance (ppm)	Codex MRL (ppm)
Small fruit vine climbing subgroup, except fuzzy kiwifruit (Crop Subgroup 13-07F)	0.20	1.0 (Grape)	Not Established
Raisins	0.60	2.0 (Grape, raisin)	Not Established

Next Steps

The PMRA invites the public to submit written comments on the proposed MRLs for sethoxydim up to 75 days from the date of publication of this document. Please forward your comments to Publications (see the contact information on the cover page of this document). The PMRA will consider all comments received before making a final decision on the proposed MRLs. Comments received will be addressed in a separate document linked to this PMRL. The established MRLs will be legally in effect as of the date that they are entered into the Maximum Residue Limit Database.

¹ The Codex Alimentarius Commission is an international organization under the auspices of the United Nations that develops international food standards, including MRLs.

Appendix I

Summary of Field Trial Data Used to Support the Proposed MRLs

Residue data from field trials conducted in Canada were submitted to support the domestic use of Poast Ultra Liquid Emulsifiable Herbicide on grapes. Sethoxydim was applied to grapes at the proposed rate and harvested according to label directions. In addition, a processing study in treated grapes was submitted and a processing study on file was reassessed within the context of the current petition. The processing studies were used to determine the potential for concentration of residues of sethoxydim into processed commodities.

Maximum Residue Limits

The recommendation for maximum residue limits (MRLs) for sethoxydim was based upon the submitted field trial data, and the guidance provided in the OECD MRL Calculator. Table A1 summarizes the residue data used to calculate the proposed MRLs for Crop Subgroup 13-07F and raisins.

Table A1. Summary of Field Trial and Processing Data Used to Support Maximum Residue Limit (MRLs)

Commodity	Application Method/ Total Application Rate (g a.i./ha)	Preharvest Interval (days)	Residues (ppm)		Experimental Processing Factor
			Min	Max	
Grapes	Banded application at the base of the vine / 495- 527	29-30	<0.1	<0.156	3.4X (raisins) <1.0X (grape juice)

Following the review of all available data, an MRL of 0.20 ppm is recommended to cover residues of sethoxydim in/on Crop Subgroup 13-07F and an MRL of 0.60 ppm is recommended to cover residues of sethoxydim in/on raisins. Residues of sethoxydim in these commodities at the proposed MRLs will not pose an unacceptable risk to any segment of the population, including infants, children, adults and seniors.